

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-NM-185-AD; Amendment 39-13801; AD 2004-19-07]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model DHC-8-102 Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Bombardier Model DHC-8-102 airplanes, that requires modification of the electrical power circuit. This action is necessary to prevent component failure in the radar indicator, resulting in an overcurrent condition and consequent overheating or burning of an internal component or the ribbon cable. This could lead to smoke in the cockpit, resulting in incapacitation of the flight crew and loss of control of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective October 27, 2004.

The incorporation by reference of a certain publication listed in the regulations is approved by the Director of the Federal Register as of October 27, 2004.

ADDRESSES: The service information referenced in this AD may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Ave., suite 410, Westbury, New York; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:
http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

FOR FURTHER INFORMATION CONTACT: Doug Wagner, Aerospace Engineer, Systems and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office, 1600 Stewart Ave., suite 410, Westbury, New York 11590; telephone (516) 228-7306; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Bombardier Model DHC-8-102 airplanes was published in the Federal Register on April 7, 2004 (69 FR 18306). That action proposed to require modification of the electrical power circuit.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the single comment received.

Request To Give Credit for Modification Using Alternate Service Information

The commenter, an operator, requests that a paragraph be added to the proposed AD giving credit for reconfiguring the circuit breaker wiring as specified in Allied Signal RDS-86 Weather Radar System Manual 006-05996-0005, Revision 5 or higher. The commenter states that it has operated the affected Model DHC-8-102 airplanes continually since 1986, and that the performance of the RDS-86 weather radar system made consultation with the airplane and equipment manufacturers necessary. In 1996, the commenter reconfigured certain circuit breakers for the weather radar system per the equipment manufacturer's recommendations. The commenter notes that the airplane manufacturer did not provide documentation for this change until 2002, when it issued Bombardier Modification Summary Package (ModSum) IS8Q3450000, Revision A, dated October 15, 2002, which the proposed AD references as the appropriate source of service information for the proposed requirements.

The FAA does not agree. It is important to maintain proper configuration of airplane wiring to ensure proper airplane maintenance by operators. The final rule requires modification of the power circuit per ModSum IS8Q3450000, Revision A. The ModSum identifies three installation configurations, and the ModSum installation instructions identify the correct interface buses to be modified and wires to be reconfigured. The Allied Signal RDS-86 Weather Radar System Manual shows only pin connections of the indicator and receiver/transmitter without any details of unique airplane interconnections. Such limited information provides no means of showing that appropriate wiring changes have been made and is insufficient to demonstrate that the unsafe condition has been addressed properly. We have not changed the final rule in this regard. However, under the provisions of paragraph (b) of the final rule, we may consider requests for approval of an alternative method of compliance if sufficient data are submitted to substantiate that such a design change would provide an acceptable level of safety.

Conclusion

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

The FAA estimates that 48 airplanes of U.S. registry will be affected by this AD, that it will take between 3 work hours and 9 work hours per airplane to accomplish the required actions, and that the average labor rate is \$65 per work hour. Required parts will cost approximately \$150 per airplane. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be between \$16,560 and \$35,280, or between \$345 and \$735 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD

rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-19-07 Bombardier, Inc. (Formerly de Havilland, Inc.): Amendment 39-13801. Docket 2003-NM-185-AD.

Applicability: Model DHC-8-102 airplanes, serial numbers 023 through 392 inclusive; certificated in any category; equipped with an RDS86 Weather Radar System, excluding those airplanes equipped with option CR834CH00284.

Compliance: Required as indicated, unless accomplished previously.

To prevent component failure in the radar indicator, resulting in an overcurrent condition and consequent overheating or burning of an internal component or the ribbon cable, which could lead to smoke in the cockpit, resulting in incapacitation of the crew and loss of control of the airplane; accomplish the following:

Modification

(a) Within 12 months after the effective date of this AD, modify the electrical power circuit by accomplishing all the actions in the Accomplishment Instructions of Bombardier Modification Summary Package (ModSum) IS8Q3450000, Revision A, dated October 15, 2002; as applicable. Do the actions per the ModSum.

Alternative Methods of Compliance

(b) In accordance with 14 CFR 39.19, the Manager, New York Aircraft Certification Office (ACO), FAA, is authorized to approve alternative methods of compliance for this AD.

Incorporation by Reference

(c) The actions shall be done in accordance with Bombardier Modification Summary Package IS8Q3450000, Revision A, dated October 15, 2002. (The date of the Modification Summary Package only appears on the first page of the document.) This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Ave., suite 410, Westbury, New York; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Note 1: The subject of this AD is addressed in Canadian airworthiness directive CF-2003-13, effective June 20, 2003.

Effective Date

(d) This amendment becomes effective on October 27 2004.

Issued in Renton, Washington, on September 14, 2004.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-21174 Filed 9-21-04; 8:45 am]

BILLING CODE 4910-13-P